



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,623	07/06/2001	Paul Aubin	P48-1240-1	7380

7590 11/02/2004
Marina F. Cunningham
McCormick, Paulding & Huber LLP
Cityplace II
185 Asylum Street
Hartford, CT 06103-3402

EXAMINER

FEGGINS, KRISTAL J

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,623

Applicant(s)

AUBIN ET AL.

Examiner

K. Feggins

Art Unit

2861



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 10 and 17-19 is/are allowed.
- 6) ☒ Claim(s) 1, 8, 11, 12, 14, 20 and 23 is/are rejected.
- 7) ☒ Claim(s) 2-7, 13, 15, 16, 21, 22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 17 recites the limitation "said edge of said strip material" in line 2. (for the purpose of the rejection, the above limitation has not been given consideration). There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

The indicated allowability of claims 1-8, 11-16, 20-24 is withdrawn in view of the newly discovered reference(s) to Sattler (US 6,095,701). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8, 11, 12, 14, 20, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sattler (US 6,095,701) in view of Baranyi (US 4,685,815).

Sattler discloses the following claimed limitations:

* regarding claim 1, a printer having a printhead assembly for printing on a sheet material disposed on a worksurface (Abstract, col 1, lines 57-65);

* a printhead support structure for supporting said printhead assembly (Abstract, col 3, line 56-col 4, line 19, figs 1-3);

* means for securing said printhead assembly to said printhead support structure (col 3, line 56-col 4, line 19, figs 1-3);

* means for adjusting angular orientation of said printhead assembly with respect to said worksurface, said means for adjusting said angular orientation being disposed within said printhead assembly (col 3, line 56-col 4, line 19, figs 1-3);

* regarding claim 8, wherein said printhead support structure removably supports said printhead assembly (col 5, lines 42-47, 5467, col 6, lines 1-4)

* regarding claim 11, a method for adjusting orientation of a removable printhead assembly within a printer (Abstract);

* positioning said printhead assembly adjacent to a printhead support structure (Abstract, col 3, line 56-col 4, line 19, figs 1-3);

* securing said printhead assembly to said printhead supporting structure (col 3, line 56-col 4, line 19, figs 1-3);

* adjusting position of said printhead assembly within said printhead supporting structure for said printhead assembly to be properly oriented with respect to a worksurface by adjusting means for adjusting orientation of said printhead with respect to said worksurface, wherein said means for adjusting is disposed within said printhead assembly (col 3, line 56-col 4, line 19, figs 1-3);

* regarding claim 12, the steps of checking whether said printhead is properly positioned with respect to said worksurface (col 3, line 56-col 4, line 30, figs 1-3);

* readjusting said means for adjusting for correcting orientation of said printhead with respect to said worksurface (col 3, line 56-col 4, line 30, figs 1-3);

* regarding claim 14, a printer having a printhead assembly for printing on a sheet material disposed on a worksurface (Abstract, col 1, lines 57-65);

* a printhead support structure for supporting said printhead assembly (Abstract, col 3, line 56-col 4, line 19, figs 1-3);

* means for securing said printhead assembly to said printhead support structure (col 3, line 56-col 4, line 19, figs 1-3);

* means for adjusting skew of said printhead assembly with respect to an edge of said sheet material, said means for adjusting skew being disposed within said printhead assembly (col 3, line 56-col 4, line 30, figs 1-3);

* regarding claim 20, a method for adjusting skew of a printhead assembly with respect to an edge of a strip material disposed on a worksurface (Abstract, col 1, lines 57-65);

* positioning said printhead assembly adjacent to a printhead support structure (col 3, line 56-col 4, line 19, figs 1-3);

* securing said printhead assembly to said printhead support structure col 3, line 56-col 4, line 19, figs 1-3);

* adjusting a mechanism for adjusting skew of said printhead assembly with respect to an edge of strip material to ensure proper orientation of said printhead assembly with respect to said edge of said strip material disposed on said worksurface, with the mechanism for adjusting skew being disposed within said printhead assembly (col 3, line 56-col 4, line 30, figs 1-3);

* regarding claim 23, a printer having a printhead assembly for printing on a sheet material disposed on a worksurface; (Abstract, col 1, lines 57-65);

* a printhead support structure for supporting said printhead assembly (col 3, line 56-col 4, line 19, figs 1-3);

* means for securing said printhead assembly to said printhead support structure (col 3, line 56-col 4, line 19, figs 1-3);

* means for adjusting angular orientation of said printhead assembly with respect to said worksurface, said means for adjusting said angular orientation being disposed within said printhead assembly (col 3, line 56-col 4, line 19, figs 1-3);

* means for adjusting skew of said printhead assembly with respect to an edge of said sheet material (col 3, line 56-col 4, line 30, figs 1-3);

Sattler does not disclose the following claimed limitations:

* printhead assembly including a plurality of printing elements

Baranyi discloses the following claimed limitations:

* printhead assembly including a plurality of printing elements (col 1, lines 26-30) for the purpose of forming an image on the print medium as it passed the printhead.

Art Unit: 2861

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a printhead assembly including a plurality of printing elements, taught by Baranyi into Sattler for the purpose forming an image on the print medium as it passed the printhead.

Allowable Subject Matter

5. Claims 9-10, 17-19 are allowed.

Claims 2-8, 13, 15, 16, 21, 22 & 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The primary reason for indicating allowable subject matter of claims 2-7 is the inclusion of limitations of a printhead assembly that includes means for securing said printhead assembly to said printhead support structure is a pin for attaching said printhead assembly to said printhead support structure; and means for adjusting angular orientation is at least one means for engaging said pin, said at least one means for engaging being supported by said printhead assembly, said at least one means for engaging allowing adjustment of said printhead assembly to properly position said printing elements with respect to said worksurface. It is these limitations found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the allowance of claims 9-10 is the inclusion of limitations of a printhead assembly that includes a pin for removably securing said printhead assembly to said printhead support structure, and at least one set screw engaging said pin for adjusting angular orientation of said printing elements of said printhead assembly with respect to said worksurface, said set screw being disposed within said printhead assembly. It is these limitations found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The following is an examiner's statement of reasons for allowance: The primary reason for the indicating the allowable subject matter of claim 13 is the inclusion of the method steps for adjusting orientation of a removable printhead assembly that includes the step of adjusting at least one set screw that engages a pin supporting said printhead assembly within said printhead supporting structure. It is these steps found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claims 15-16 is the inclusion of limitations of a printhead assembly that includes a pin having a pin body and a pin surface, said pin securing said printhead assembly within said printhead assembly structure. It is these limitations found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the allowance of claims 17-19 is the inclusion of limitations of a printhead assembly that includes a pin for securing said printhead assembly and engaging said printhead support structure and at least one cam cooperating with said pin to adjust position of said printhead with respect to an edge of said strip material. It is these limitations found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claim 21 is the inclusion of method steps for adjusting skew of a printhead assembly that includes checking whether said printhead assembly is printing properly with respect to said edge of said strip material disposed on said worksurface and readjusting said mechanism for adjusting skew to ensure proper orientation of said printhead assembly with respect to said edge of said strip material disposed on said worksurface. It is these method steps found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claim 22 is the inclusion of method steps for adjusting skew of a printhead assembly that includes adjusting at least one cam to engage a pin securing said printhead assembly to said printhead support structure for proper positioning of said printhead assembly. It is these method steps found in the claims, as they are claimed in the combination of, which has

Art Unit: 2861

not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claim 24 is the inclusion of limitations of a printer having a printhead assembly that includes means for securing said printhead assembly to said printhead support structure is a pin for attaching said printhead assembly to said printhead support structure; said means for adjusting angular orientation is at least one set screw engaging said pin for adjusting angular orientation of said printing elements of said printhead assembly with respect to said worksurface; and said means for adjusting skew is at least one cam cooperating with said pin to adjust position of said printhead with respect to said edge of said strip material. It is these limitations found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Isogai (US 5436772) discloses a thermal transfer printing apparatus in which a thermal head having a series of selectively energized heating elements. Nagahata et al. (US 5874983) disclose a printhead assembly with a set

Art Unit: 2861


screw disposed within the printhead. Kapushinski et al. (US 6,452,620 B1) disclose methods an apparatus for improved thermal printing.

Communication With The USPTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


K. Feggins
Primary Examiner
October 29, 2004